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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/815,405	Applicant(s) RIDDLE, GUY	
	Examiner SALMAN AHMED	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/9/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7,9-25,28-36,38 and 41-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,9-25,28-36,38 and 41-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/9/2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1, 2, 4, 5, 7, 9, 10-25, 28-36, 38 and 41-58 are pending.

Claims 1, 2, 4, 5, 7, 9-25, 28-36, 38 and 41-58 are rejected.

Claims 3, 6, 8, 26, 27, 37, 39 and 40 are cancelled.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 48, 49, 54, 55, 57 and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Rao (US20040264395).

Regarding claim 48, Rao teaches method facilitating remote, automated deployment of a network device on a network (see paragraphs 9-11), comprising establishing, in an unconfigured mode (see paragraph 32 unconfigured wireless device), a connection with a remote device for configuration information (see paragraph 33 configured computing device); providing, during the connection, a hardware profile of a network device (see paragraph 0048); receiving configuration information (see figure 5 ref s502 and s503) from the remote device (see paragraphs 42-48) based on the hardware profile (see paragraphs 42-48).

Regarding claim 49, Rao teaches further comprising: obtaining a network address before the establishing step (see paragraph 45).

Regarding claim 54, Rao teaches the establishing step is performed in response to the receipt of a configuration message transmitted by the remote device (see Rao figure 5 ref s510 acceptable access point determined).

Regarding claim 55, Rao teaches the configuration message is addressed to the broadcast address of the network (see Rao paragraph 46).

Regarding claim 57, Rao teaches a second network device connected to the network is operative to broadcast the network address of the remote device (see Rao paragraph 45-48).

Regarding claim 58, Rao teaches the network comprises a second network (see paragraph 46 and it is inherent for the networking system to include second/plurality of client devices) device operative to transmit the network address of the remote device in response to a request (see paragraph 46); and wherein the method further comprises broadcasting a request for the network address of the remote device (see paragraph 47).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 7, 24, 25, 28, 34, 35, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao (US20040264395) in view of Philippou et al.

(US PAT 6385648, hereinafter Philippou) and Hershey et al. (US PAT 5481539, hereinafter Hershey).

Regarding claim 1, Rao discloses configuration of wireless network client (see paragraph 9 and 10) comprising: monitoring, at a network device operating in an unconfigured mode (see paragraph 32 unconfigured wireless device), for a configuration message (see paragraph 33 predetermined message), wherein the configuration message includes information sufficient for an initial automated remote deployment of the network device (see paragraph 37 automatic configuration of the wireless network client), including an IP address for a remote network management system (paragraph 0046), and switching the network device to a configured mode (paragraph 0053, Wireless network client 2 initializes the configuration process in order for wireless network client 2 to eventually detect the predetermined broadcast message from configured computing device 1 and configure itself automatically).

Rao does not explicitly teach a network device operating in an unconfigured network address mode and including an internet protocol (IP) address for the network device, wherein the network device is disposed on a communications path between a first network and a second network and wherein configuration message is transmitted from a remote device on the first network and addressed to a destination host on the second network; upon detection of the configuration message, configuring the network device with the IP address for the network device information in the configuration message; and switching the network device to a configured mode.

Philippou in the same field of endeavor teaches a network device (figure 2, box 205) operating in an unconfigured network address mode (column 3 lines 6-17, in one

embodiment, box 205 is a network switch. In the embodiment illustrated in FIG. 2, box 205 is recognized in network 211 using network identifier 221. In an embodiment where TCP/IP communications protocols are used for communications within network 211, network identifier 221 includes an IP address. As also depicted in the embodiment illustrated in FIG. 2, box 205 also includes a subnet mask 223 and a default gateway 225, which are utilized for network communications. In addition to network identifier 221, box 225 also includes a unique identifier 227. In one embodiment, unique identifier 227 includes a serial number of box 205) and including an internet protocol (IP) address for the network device (column 5, lines 53-56, therefore, it will be known to box 205 that when the initialization message is received, the network identifier 221, subnet mask 223 and default gateway 225 included in the initialization message are intended for box 205), wherein the network device is disposed on a communications path (Figure 2, path between network 211 and network 215) between a first network (Figure 2, network 211) and a second network (Figure 2, network 215) and wherein configuration message is transmitted from a remote device (figure 2, configuration utility) on the first network (Figure 2, network 211) and addressed to a destination host (figure 2, here destination host being interpreted as the box 205, having message addressed with elements 221, 223, 225 and 227) on the second network (Figure 2, network 215); upon detection of the configuration message, configuring the network device with the IP address for the network device information in the configuration message; and switching the network device to a configured mode (column 5 lines 56-65, in one embodiment, after box 205 receives the initialization message broadcast from configuration utility 231, box 205 updates its values for network identifier 221, subnet mask 223 and default gateway 225.

Once these values of box 205 have been updated, one embodiment of box 205 sends a second acknowledgement directed to configuration utility 231 over network 211 to indicate that its network identifier 221, subnet mask 223 and default gateway 225 settings have been initialized).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao's system/method the steps of a network device operating in an unconfigured network address mode and including an internet protocol (IP) address for the network device, wherein the network device is disposed on a communications path between a first network and a second network and wherein configuration message is transmitted from a remote device on the first network and addressed to a destination host on the second network; upon detection of the configuration message, configuring the network device with the IP address for the network device information in the configuration message; and switching the network device to a configured mode as suggested by Philippou. The motivation is that (as suggested by Philippou, columns 1-2 lines 54-17) such method streamlines addition of new devices in network by avoiding situations where more than one box is added to the network, the network administrator must separately initialize the network identifier of each box; thus implementing an efficient remote network management and configuration process. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Rao and Philippou teach in the unconfigured network address mode receiving configuration messages as described above but do not explicitly teach forwarding, all packets received at the network device, other than packets intended for itself, along the communications path.

Hershey in the same field of endeavor teaches the recipient mobile units compare their internal ID with the `DESTINATION ID` in the message packet. If they match the message packet has been successfully transmitted to its intended mobile unit. If the IDs do not match, then valid message packets are then broadcast to nearby mobile units at a time which would not overlap the time slot allocated to this mobile unit (column 1 lines 41-48)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao and Philippou's system/method the steps of forwarding, all packets received at the network device, other than packets intended for itself, along the communications path as suggested by Hershey. The motivation is that (as suggested by Hershey, column 2 lines 32-36) the message transmissions are executed without any intervention or control from a central station, thereby resulting in direct and efficient message transmission with little or no extra overhead and resources. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 2, Rao teaches transmitting a message to the remote network management system (see paragraph 42, configuration announcement message).

Regarding claim 4, Rao teaches the transmitting step comprises initiating a connection to the remote network management system (see paragraphs 45-50).

Regarding claim 5, Rao teaches further comprising receiving additional configuration from the remote device (see paragraphs 46 and 47).

Regarding claim 7, Rao teaches further comprising validating the configuration message before the configuring step (see figure 5 ref s510 acceptable access point determined).

Regarding claim 24, Rao teaches a method facilitating remote deployment of network devices (see paragraphs 9-10), comprising monitoring, at a network device in an unconfigured mode, for a configuration message transmitted by a network management system (see paragraph 32 unconfigured wireless device), wherein the configuration message (see paragraph 33 predetermined message) includes configuration information for the network device (see paragraph 37 automatic configuration of the wireless network client); after detection of a configuration message, validating the configuration message (see figure 5 ref s510 acceptable access point determined); if the configuration message is valid, configuring the network device using the configuration information in the configuration message (see figure 5 ref s511 configure wireless network client and paragraph 33).

Rao does not explicitly teach the network device is disposed on a communications path between a first network and a second network.

Philippou in the same field of endeavor teaches the network device is disposed on a communications path (Figure 2, path between network 211 and network 215)

between a first network (Figure 2, network 211) and a second network (Figure 2, network 215).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao's system/method the steps of the network device being disposed on a communications path between a first network and a second network as suggested by Philippou. The motivation is that such method enables a system situated between two networks to relay messages between the networks enabling successful inter-network communication. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Rao and Philippou teach receiving configuration messages but do not explicitly teach if a message is not valid, forwarding the message along the communications path; and forwarding all messages other than messages intended for itself received at the network device along the communications path.

Hershey in the same field of endeavor teaches the recipient mobile units compare their internal ID with the `DESTINATION ID` in the message packet. If they match the message packet has been successfully transmitted to its intended mobile unit. If the IDs do not match, then valid message packets are then broadcast to nearby mobile units at a time which would not overlap the time slot allocated to this mobile unit (column 1 lines 41-48)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao and Philippou's system/method the steps of if a

message is not valid, forwarding the message along the communications path; and forwarding all messages other than messages intended for itself received at the network device along the communications path as suggested by Hershey. The motivation is that (as suggested by Hershey, column 2 lines 32-36) the message transmissions are executed without any intervention or control from a central station, thereby resulting in direct and efficient message transmission with little or no extra overhead and resources. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 25, Rao teaches the configuration message includes information sufficient for the network device to establish a network connection to network management device (see paragraph 37 automatic configuration of the wireless network client and paragraph 48).

Regarding claim 28, Rao teaches the configuration information comprises network address corresponding to the network management system (see paragraph 45 configured computing device).

Rao does not explicitly teach the configuration information comprises a network address for the network device.

Philippou in the same field of endeavor teaches configuration information including an internet protocol (IP) address for the network device (column 5, lines 53-56, therefore, it will be known to box 205 that when the initialization message is received, the network identifier 221, subnet mask 223 and default gateway 225 included in the initialization message are intended for box 205).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao's system/method the steps of the configuration information comprising a network address for the network device as suggested by Philippou. The motivation is that (as suggested by Philippou, columns 1-2 lines 54-17) such method streamlines the addition of new devices in network by avoiding situations where more than one box is added to the network, the network administrator must separately initialize the network identifier of each box; thus implementing an efficient remote network management and configuration process. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 34, Rao teaches method facilitating remote deployment of network devices, comprising: receiving at a network device in an unconfigured state (see paragraph 32 unconfigured wireless device), a configuration message (see paragraph 33 predetermined message) transmitted by a network management system (see paragraph 33 configured computing device), wherein the configuration message includes configuration information for the network device (see paragraph 33 predetermined message and paragraph 48); after detection of a configuration message, validating the configuration message (see figure 5 ref s511) acceptable access point determined); if the configuration message is valid, configuring the network device using the configuration information in the configuration message (see figure 5 ref s511 configure wireless network client and paragraph 48).

Rao does not explicitly teach a first network interface of a network device and the first network interface and a second network interface of the network device are operably connected to a communications path between a first network and a second network.

Philippou in the same field of endeavor teaches a first network interface (Figure 2, associated interface connecting network 211 to box 205) of a network device (Figure 2, box 205) and the first network interface (Figure 2, associated interface connecting network 211 to box 205) and a second network interface (Figure 2, associated interface connecting network 215 to box 205) of the network device are operably connected to a communications path between a first network and a second network (Figure 2, path between network 211 and network 215).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao's system/method the steps of a first network interface of a network device and the first network interface and a second network interface of the network device are operably connected to a communications path between a first network and a second network as suggested by Philippou. The motivation is that such method enables a system situated between two networks to relay messages between the networks enabling successful inter-network communication. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Rao and Philippou teach receiving configuration messages but do not explicitly teach if a message is not valid, forwarding the message along the communications path; and forwarding all messages other than messages intended for itself received at the network device along the communications path.

Hershey in the same field of endeavor teaches the recipient mobile units compare their internal ID with the `DESTINATION ID` in the message packet. If they match the message packet has been successfully transmitted to its intended mobile unit. If the IDs do not match, then valid message packets are then broadcast to nearby mobile units at a time which would not overlap the time slot allocated to this mobile unit (column 1 lines 41-48)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao and Philippou's system/method the steps of if a message is not valid, forwarding the message along the communications path; and forwarding all messages other than messages intended for itself received at the network device along the communications path as suggested by Hershey. The motivation is that (as suggested by Hershey, column 2 lines 32-36) the message transmissions are executed without any intervention or control from a central station, thereby resulting in direct and efficient message transmission with little or no extra overhead and resources. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 35, Rao teaches the configuration information includes the network address (see paragraph 45) of a network management system (see paragraph

33 configured computing device) and wherein the method further comprises establishing a connection to the network management system using the network address in the configuration information (see paragraph 45-50).

Regarding claim 36, Rao teaches network device allowing for automated, remote deployment (see paragraphs 9-11), comprising: operative to transmit and receive packets over a computer network (see paragraphs 47-48, and figure 5 shows that it communicates with wireless client device); a configuration interface module operative to configure the network device based on received configuration information (see paragraphs 37-38); and a configuration daemon (paragraph 0039, client configuration module 412) operative, when the network device is an Unconfigured state (see paragraph 32 unconfigured wireless device), receive a configuration message transmitted by a network management system (see paragraph 33 predetermined message); validate the configuration message (see figure 5 ref S510 acceptable access point determined); and invoke the configuration interface module if the configuration message is valid configuration message (paragraph 0039, see figure 5 ref 511 configure wireless network client). Rao further teaches receiving configuration message at network interface (paragraph 0038), a processor (Figure 4, CPU 401), and computer readable instructions used by processor (paragraphs 0038-0039).

Rao does not explicitly teach a first and second network interfaces.

Philippou in the same field of endeavor teaches a first network interface (Figure 2, associated interface connecting network 211 to box 205) of a network device (Figure 2, box 205) and the first network interface (Figure 2, associated interface connecting network 211 to box 205) and a second network interface (Figure 2, associated interface

connecting network 215 to box 205) of the network device are operably connected to a communications path between a first network and a second network (Figure 2, path between network 211 and network 215).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao's system/method the steps of a first network interface of a network device and the first network interface and a second network interface of the network device are operably connected to a communications path between a first network and a second network as suggested by Philippou. The motivation is that such method enables a system situated between two networks to relay messages between the networks enabling successful inter-network communication. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Rao and Philippou teach receiving configuration messages but do not explicitly teach passing, if a message is not valid, the message for forwarding along a communications path; and pass packets other than valid messages received for forwarding along the communications path.

Hershey in the same field of endeavor teaches the recipient mobile units compare their internal ID with the 'DESTINATION ID' in the message packet. If they match the message packet has been successfully transmitted to its intended mobile unit. If the IDs do not match, then valid message packets are then broadcast to nearby

mobile units at a time which would not overlap the time slot allocated to this mobile unit (column 1 lines 41-48)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao and Philippou's system/method the steps of receiving configuration messages but do not explicitly teach passing, if a message is not valid, the message for forwarding along a communications path; and pass packets other than valid messages received for forwarding along the communications path as suggested by Hershey. The motivation is that (as suggested by Hershey, column 2 lines 32-36) the message transmissions are executed without any intervention or control from a central station, thereby resulting in direct and efficient message transmission with little or no extra overhead and resources. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 38, Rao teaches the configuration interface module is operative to configure the network device (see paragraphs 37-38) to communicate with a remote network management system using information in the configuration message (see paragraph 33 predetermined message).

3. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao (US20040264395) in view of Philippou et al. (US PAT 6385648, hereinafter Philippou).

Regarding claim 9, Rao disclose a method facilitating remote deployment and configuration of a network device physically installed on a first network, wherein the

network device is initially unconfigured (see paragraph 32 unconfigured wireless device) and operative to intercept configuration messages (see paragraph 33 predetermined message), comprising: composing a configuration message including configuration information corresponding to a network device (see paragraph 33 predetermined message); and the configuration information comprises an IP address for a remote network management system (paragraph 0046) and disclose all the subject matter of the claimed invention with the exception of: transmitting from a second network a configuration message to a destination host in the first network, wherein the network device is disposed on the communications path between the second network and the destination host and wherein the configuration information comprises an internet protocol (IP) address for the network device.

Philippou in the same field of endeavor teaches a network device (figure 2, box 205) operating in an unconfigured network address mode (column 3 lines 6-17, in one embodiment, box 205 is a network switch. In the embodiment illustrated in FIG. 2, box 205 is recognized in network 211 using network identifier 221. In an embodiment where TCP/IP communications protocols are used for communications within network 211, network identifier 221 includes an IP address. As also depicted in the embodiment illustrated in FIG. 2, box 205 also includes a subnet mask 223 and a default gateway 225, which are utilized for network communications. In addition to network identifier 221, box 205 also includes a unique identifier 227. In one embodiment, unique identifier 227 includes a serial number of box 205) and including an internet protocol (IP) address for the network device (column 5, lines 53-56, therefore, it will be known to box 205 that when the initialization message is received, the network identifier 221, subnet mask 223

and default gateway 225 included in the initialization message are intended for box 205), wherein the network device is disposed on a communications path (Figure 2, path between network 211 and network 215) between a first network (Figure 2, network 211) and a second network (Figure 2, network 215) and wherein configuration message is transmitted from a remote device (figure 2, configuration utility) on the first network (Figure 2, network 211) and addressed to a destination host (figure 2, here destination host being interpreted as the box 205, having message addressed with elements 221, 223, 225 and 227) on the second network (Figure 2, network 215); upon detection of the configuration message, configuring the network device with the IP address for the network device information in the configuration message; and switching the network device to a configured mode (column 5 lines 56-65, in one embodiment, after box 205 receives the initialization message broadcast from configuration utility 231, box 205 updates its values for network identifier 221, subnet mask 223 and default gateway 225. Once these values of box 205 have been updated, one embodiment of box 205 sends a second acknowledgement directed to configuration utility 231 over network 211 to indicate that its network identifier 221, subnet mask 223 and default gateway 225 settings have been initialized).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate in Rao's system/method the steps of transmitting from a second network a configuration message to a destination host in the first network, wherein the network device is disposed on the communications path between the second network and the destination host and wherein the configuration information comprises an internet protocol (IP) address for the network device as suggested by

Philippou. The motivation is that (as suggested by Philippou, columns 1-2 lines 54-17) such method streamlines addition of new devices in network by avoiding situations where more than one box is added to the network, the network administrator must separately initialize the network identifier of each box; thus implementing an efficient remote network management and configuration process. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 10, Rao teaches further comprising repeating the configuration message until a response to the configuration message is received from the network device (see paragraph 33 repeatedly broadcasts a predetermined message).

Regarding claim 11, Rao teaches the configuration information comprises information sufficient for the network device to establish a network connection with the network management system (see paragraph 37 automatic configuration of the wireless network client and paragraph 48).

Regarding claim 12, Rao teaches the configuration message (see paragraphs 45-46 broadcast message), a sub- network mask for the first network (see paragraphs 45-46 subnet), and the network address of the gateway router corresponding to the first network (see paragraphs 45-46 respective IP address).

7. Claims 30, 32, 41-47 and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao, Philippou and Hershey as applied to claims 24 above and further in view of Nomura et al., hereinafter Nomura, (US6930984).

Regarding claim 30, Rao, Philippou and Hershey disclose all the subject matter of the claimed invention with the exception of: teaches network device is operably connected to a first network comprising a gateway router having a gateway network address; wherein the Configuration information in the configuration message comprises the network address of a gateway router; and wherein the validating step comprises determining whether the network address of the gateway router matches the gateway network address of the gateway router

Nomura from the same or similar fields of endeavor teaches the use of comparing the information (see Nomura col. 19 lines 35-40 and col. 19 lines 61-co1. 20 line 4).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the communication path through networks and communication traffic between client and server as taught by Nomura in the configuration of wireless network client of Rao in order to provide a service for communicating traffic between the client and server at a priority higher than that of other traffic (see Nomura col. 20 lines 18-20). Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 32, Rao teaches the monitoring step comprises intercepting, at a first network interface, a configuration message (see paragraph 33 predetermined message)transmitted by a network management system (see paragraph 33 configured computing device); And disclose all the subject matter of the claimed invention with the

exception of: passing other packets to a second network interface for forwarding along the communications path.

Nomura from the same or similar fields of endeavor teaches the use of networks 131, to 133 and communication path (see figure 2 ref 13 network and col. 13 lines 1-13) and communication path from the client to server will eventually be Completed and will be possible to provide a service for communicating traffic between client and server (see Nomura col. 16 lines 16-20). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the communication path through networks and communication traffic between client and server as taught by Nomura in the configuration of wireless network client of Rao in order to provide efficiency to traffic communication through networks. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claim 41, Rao teaches in a network environment (see paragraph 9 and 10), the method comprising identifying a destination host on the first network (see paragraph 33), wherein an unconfigured network device (see paragraph 32 unconfigured wireless device) is disposed on the communications path between the gateway router and the network device (see paragraph 45), wherein the network device is operative (see paragraph 37 automatic configuration of the wireless network client), in an unconfigured mode, to intercept configuration messages (see paragraph 33 predetermined message); transmitting a configuration message to the first network, wherein the configuration message is addressed to the destination host (see paragraph

33). And disclose all the subject matter of the claimed invention with the exception of: comprising a first network and a second network, wherein the first network includes a gateway router allowing access to resources on at least the second network, a method facilitating remote configuration of a network device physically installed on the first network.

Nomura from the same or similar fields of endeavor teaches the use of networks 131, to 133 and communication path (see figure 2 ref 13 network and col. 13 lines 1-13) and communication path from the client to server will eventually be completed and will be possible to provide a service for communicating traffic between client and server (see Nomura col. 16 lines 16-20).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the communication loaih through networks and communication traffic between client and server as taught by Nomura in the configuration of wireless network client of Rao in order to provide efficiency to traffic communication through networks. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Regarding claims 42-45, Rao discloses all the subject matter of the claimed invention with the exception of; (claim 42) the configuration message is formatted in a manner that causes the destination host to ignore the configuration message. (claim 43) the configuration message is formatted in a manner that causes the destination host to discard the configuration message. (claim 44) the configuration message is formatted

according to a protocol that is not implemented by the destination host. (claim 45) the configuration message is formatted according to a protocol that is not understood by the destination host. The background of Normura et al. from the same or similar fields of endeavor teaches the use of network device that does not support RSVP exists in the network, this device cannot undergo any control of quality (see Normura et al. background column 2 line 58-67). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the a RSVP exists in the network, this device cannot undergo any control of quality in the configuration of wireless network list of Rao in order to increase processing capability of each network device (see Normura et al. column 3 line 3).

Regarding claim 46, Rao teaches the configuration message includes information sufficient for the network device to establish a network connection with a remote device (see Rao paragraph 48).

Regarding claim 47, Rao teaches the configuration information (see paragraph 45 broadcast message) including a network address for the network device, a sub-network mask for the first network (see paragraph 45 subnet), a network address for the remote device (see paragraph 45 configured computing device), and the network address of the gateway, router corresponding to the first network (see paragraph 45 respective IP address).

Regarding claims 51-53, Rao teaches the • (claim 51) wherein the configuration information received from the remote device (see paragraph 33 predetermined message) • (claim 53) the subnetworks accessible to the network device (see paragraph 45), and discloses all the subject matter of the claimed invention with the exception of:

(claim 51) gathering network topology information characterizing the topology of the network to which the network device is attached; and (claim 51) providing the network topology information to the remote device; and is based on the hardware profile and the network topology information (see column 15 line 10-25). (claim 52) the network topology information comprises information concerning at least one host neighboring the network device (see column 15 line 15). (claim 53) the network topology information comprises

Nomura from the same or similar fields of endeavor teaches the use of topology information (see Normura col. 15 lines 10-25), adjacent router (see Normura col. 15 line 13-15 corresponds to neighboring the network device).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the topology information and adjacency of router as taught by Normura in the configuration of wireless network list of Rao in order to increase processing capability of each network device (see Normura et al. column 3 line 3). Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

8. Claims 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao, Philippou and Nomura as applied to claim 9 above, and further in view of Ylonen et al., hereinafter Ylonen, (US2002/0191548).

Regarding claims 13-23, Rao, Philippou and Nomura disclose all the subject matter of the claimed invention with the exception of configuration information includes:

(claim 13) the configuration information further includes a cryptographic digest of the configuration information. (claim 14) the configuration information is encrypted with an encryption key. (claim 15) the encryption key comprises a secret string of text. (claim 16) the encryption key further comprises a random number. (claim 17) the encryption key further comprises the network address of the destination host. (claim 18) the network device is pre-configured with the secret string of text. (claim 19) the encryption key is a symmetric encryption key. (claim 20) the encryption key is a private encryption key and wherein the configuration information is encrypted using an asymmetric encryption algorithm. (claim 21) the network device is preconfigured with an encryption key corresponding to the private encryption key. (claim 22) the symmetric encryption key is encrypted using an asymmetric encryption algorithm with a private encryption key. (claim 23) the network device is preconfigured with an encryption key corresponding to the private encryption key.

Ylonen et al. from the same or similar fields of endeavor teaches the use of encryption and decryption of configuration information (see Ylonen et al. paragraph 50, 52, 63, and 217) and public and private key (see Ylonen et al. paragraph 52 and 63) and key material stored in the secure storage device (see Ylonen et al. paragraph 88).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the encryption algorithm as taught by Ylonen et al. in the teaching of Rao, Philippou and Nomura in order to provide cryptographic authentication and confidentiality of traffic between two communicating network nodes (see Ylonen et al. paragraph 7). Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market

forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

8. Claims 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao, Philippou, Hershey and Nomura as applied to claim 24 above, and further in view of Ylonen et al., hereinafter Ylonen, (US2002/0191548).

Regarding claims 29 and 33, Rao, Philippou, Hershey and Nomura disclose all the subject matter of the claimed invention with the exception of configuration information includes: (claim 29) the configuration message is encrypted. (claim 33) the configuration message is encrypted and wherein the validating step comprises decrypting the configuration information. Ylonen et al. from the same or similar fields of endeavor teaches the use of encryption and decryption of configuration information (see Ylonen et al. paragraph 50, 52, 63, and 217).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the encryption algorithm as taught by Ylonen et al. in the in the teaching of Rao, Philippou, Hershey and Nomura in order to provide cryptographic authentication and confidentiality of traffic between two communicating network nodes (see Ylonen et al. paragraph 7). Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rao, Philippou, Hershey and Nomura as applied to claim 24 above, and further in view of Traversat et al. (US2007/0097885).

Regarding claim 31, Rao et al disclose all the subject matter of the claimed invention with the exception of determining step comprises broadcast an address resolution protocol request, including the network address in the configuration message, on the network.

Traversat et al. from the same or similar fields of endeavor teaches the use of broadcast a query message requesting information (see Traversat et al. paragraph 27) and ARP requests are sent for any single target IP address (see Traversat et al. paragraph 309).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use ARP requesting message in the configuration of, wireless network client of Rao in order to provide enhance system efficiency. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

10. Claims 50 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao et al in view of Ylonen et al., hereinafter Ylonen, (US2002/0191548).

Regarding claims 50, and 56, Rao discloses all the subject matter of the claimed invention with the exception of DHCP server operative to provide the network address

of the remote device in a field associated with a DHCP response transmitted to the network device.

Ylonen et al. from the same or similar fields of endeavor teaches the use of DHCP configure devices (see Ylonen et al. paragraph 28, 56, 59 and 75).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use DHCP configure devices as taught by Ylonen et al. in the network-device control system an apparatus of Normura et al. in order to obtain devices configuration information (see Ylonen et al. paragraph 27). Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.

Response to Arguments

Applicant's arguments see pages 14-19 of the Remarks section, filed 6/9/2008, with respect to the rejections of the claims have been fully considered.

Independent claims 1, 9, 24, 34 and 36 have been amended. Applicant's amendment necessitated a new ground of rejections presented in this office action. As such any further response to Applicant's argument regarding these independent claims and their dependent claims is moot.

In regards to claim 48, Applicant argues Rao fails to disclose "providing, during the connection, a hardware profile of a network device;" and "receiving configuration information from the remote device based on the hardware profile." However, Examiner respectfully disagrees with the Applicant's assertion. Rao does indeed teach the cited

limitations. Specifically, Rao further teaches the configuration announcement message from the wireless network client 2 is a device discovery announcement in according with a device discovery protocol, and preferably includes a state variable indicating that wireless network client 2 is a new device on local-network 5 and including an address (i.e. address of a hardware is a hardware profile i.e. the address of the device is part of it's hardware profile) of wireless network client 2. Further more, device discovery protocol inherently carries MAC address of the device in messages, thus MAC address being a hardware profile satisfies the cited limitation. As such, inherently, when using device discovery protocol, messages contain MAC address of the devices communicating with each other.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SALMAN AHMED whose telephone number is (571)272-8307. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A./

Examiner, Art Unit 2619

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2619